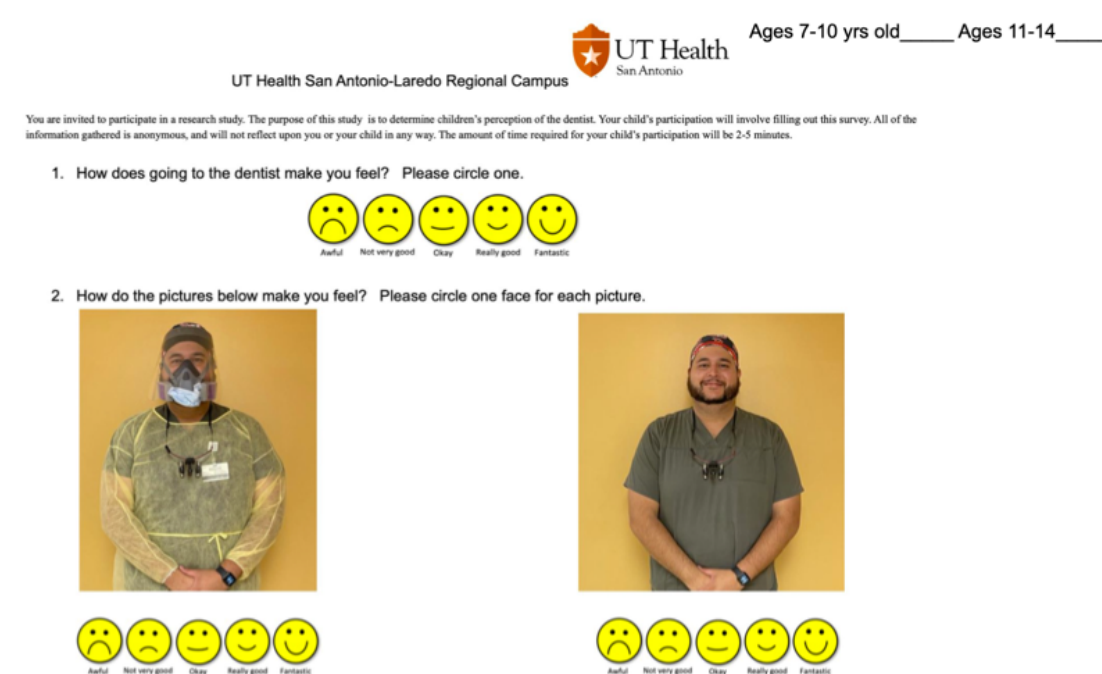


## BACKGROUND

“A prior negative dental experience and/or a higher level of fear could indicate that a child will need special attention to successfully comply with instructions and be cooperative.”<sup>1</sup> Dentists have always had the perception of fear attached to them. The fears can range from fear of needles, to fear of another person working on a patient's mouth. Reducing fear can help a dentist achieve more desirable health outcomes. Reduction of prior negative experiences may reduce the negative consequences that may come with avoidance of dental care. In 1993, the field of dentistry implemented PPE guidelines. The Occupational Safety and Health Administration adopted a Bloodborne Pathogens Standard that requires health care workers exposed to patients' blood or saliva to wear personal protective equipment.<sup>2</sup> PPE for dentists included gloves, gowns, masks, and goggles or face shields. As of March 2020, COVID-19 caused a pandemic, and the field of dentistry was faced with a new challenge. To minimize the risk of COVID-19 transmission, the Centers for Disease Control (CDC) and the American Dental Association (ADA) presented a new recommendation to include an N95 mask or respirator and face shield while in contact with patients. Before COVID-19, dentists were able to use facial expressions to gain the trust of their patients. However, the new guidelines make this difficult for dentists. The aim of this study is to determine whether the new PPE guideline has altered children's perspective of the dentist in any way.

## MATERIALS and METHODS

This study was approved by the Institutional Review Board at UT Health San Antonio. A survey form was created that determined whether or not children had negative perceptions of personal protection equipment (PPE) requirements of dentists. A consent form was given to all parents of patients that participated in the survey at the Laredo Health Department Dental Clinic during recall examinations. Surveys were collected from September 1st, 2021-February 1st, 2022. Children were placed into two groups. Group 1 consisted of children aged 7-10 years old. Group 2 consisted of children aged 11-14 years old. The first question on the form asked children about their prior perceptions of dentists. The next question consisted of two pictures. One of the pictures was of a dentist in PPE that was donned pre-COVID-19. The second picture was of a dentist in the updated COVID-19 PPE protocol. The study used a standard Wong Smiley Face Scale to measure the children's perception of the new recommendations of PPE requirements. The Wong Smiley Face Scale ranged from Awful, Not Very Good, Okay, Really Good, and Fantastic. The information gathered was used to determine whether or not the updated COVID-19 PPE guidelines have any influence on children's perception of dentists. Results were calculated using percentages. The results were then analyzed on a descriptive basis.



## RESULTS

There were a total of 224 surveys that were collected. 112 surveys from the age group 7-10 years old (Group 1) and 112 surveys from the age group 11-14 years old (Group 2). The results are outlined below:

Figure 1

- Group 1
  - 28.5% of respondents selected “Not Very Good”
  - 7.1% of respondents selected “Okay”
  - 14.3% of respondents selected “Really Good”
  - 50% of respondents selected “Fantastic”
- Group 2
  - 50% of respondents selected “Okay”
  - 14.3% of respondents selected “Really Good”
  - 35.7% of respondents selected “Fantastic”

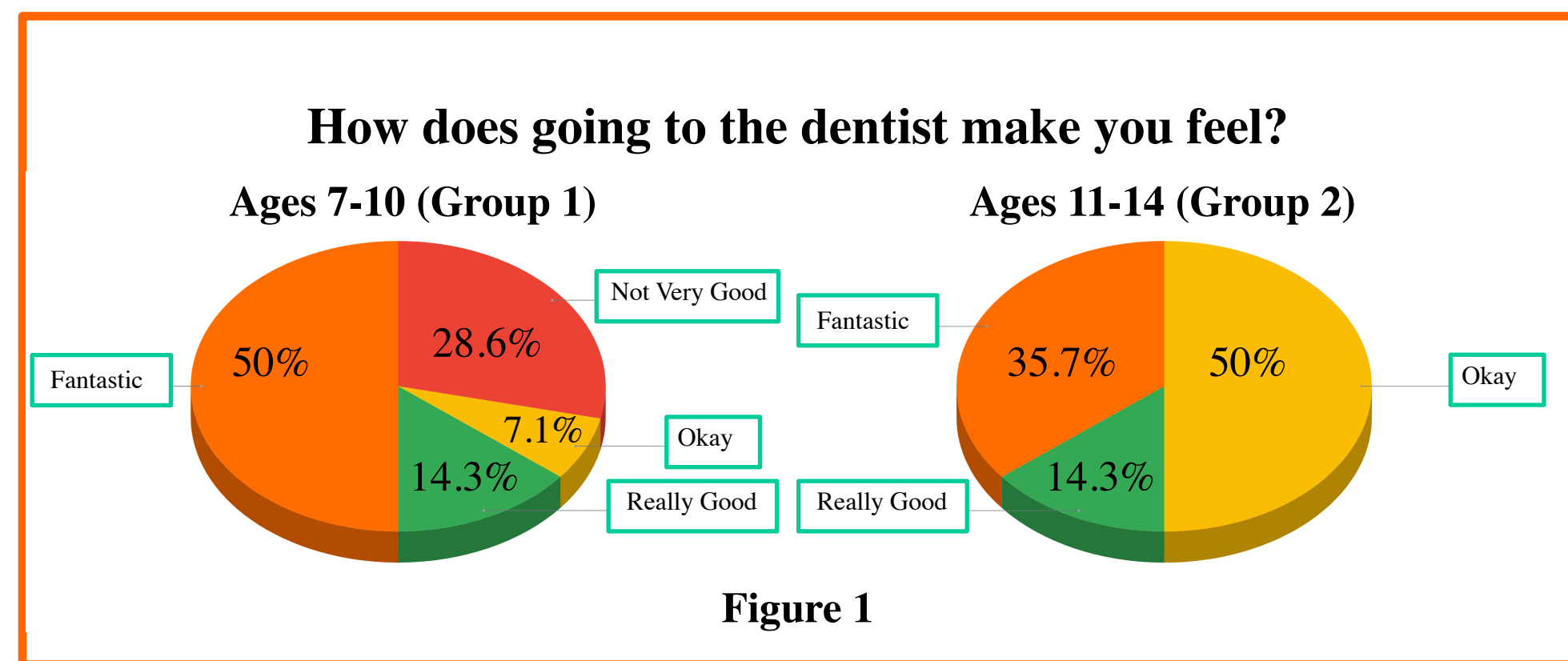
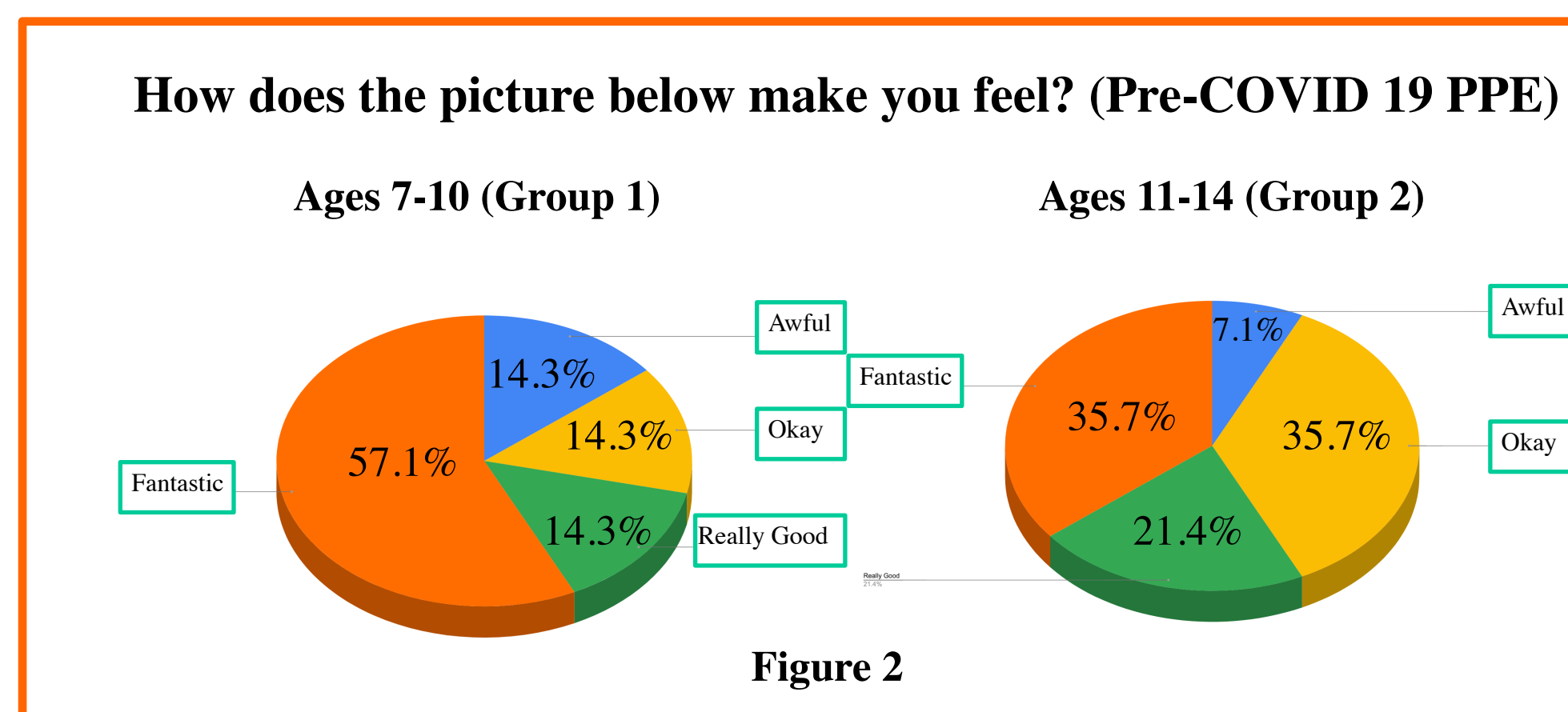


Figure 2

- Group 1
  - 14.3% of respondents selected “Awful”
  - 14.3% of respondents selected “Okay”
  - 14.3% of respondents selected “Really Good”
  - 57.1% of respondents selected “Fantastic”
- Group 2
  - 7.1% of respondents selected “Awful”
  - 35.7% of respondents selected “Okay”
  - 21.4% of respondents selected “Really Good”
  - 35.7% of respondents selected “Fantastic”

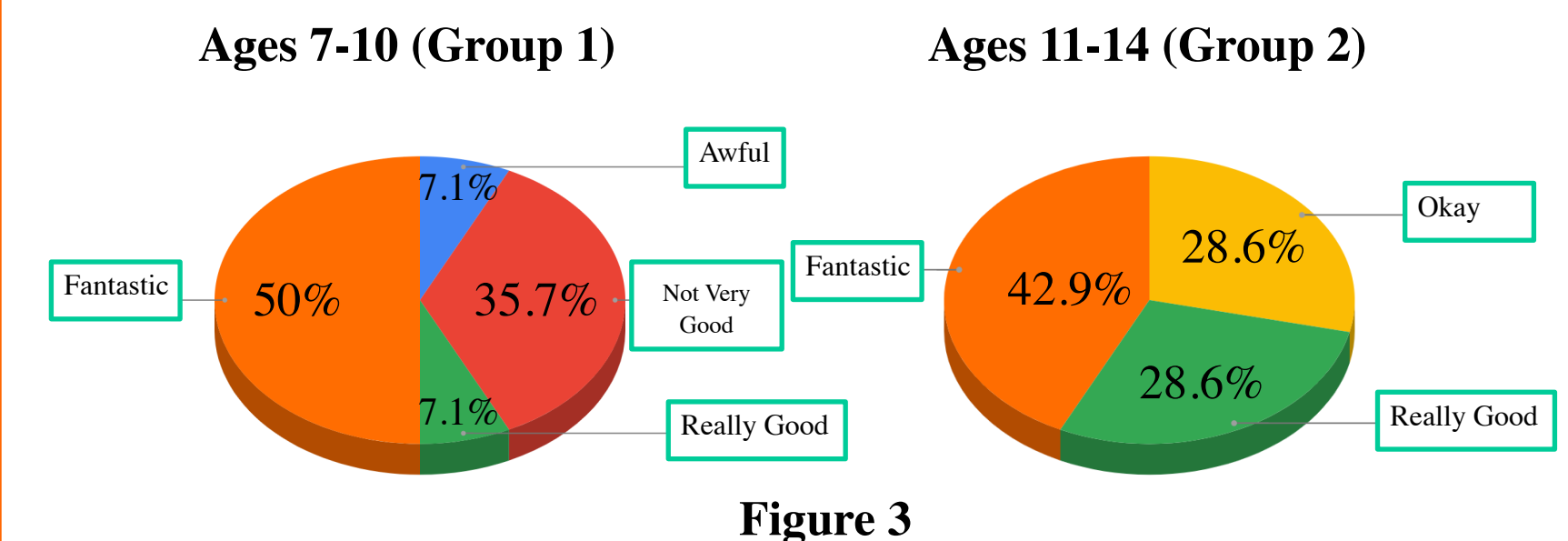


## RESULTS (cont.)

Figure 3

- Group 1
  - 7.1% of respondents selected “Awful”
  - 35.7% of respondents selected “Not Very Good”
  - 7.1% of respondents selected “Really Good”
  - 50% of respondents selected “Fantastic”
- Group 2
  - 28.6% of respondents selected “Okay”
  - 28.6% of respondents selected “Really Good”
  - 42.9% of respondents selected “Fantastic”

### How does the picture below make you feel? (COVID 19 PPE)



## CONCLUSIONS

- Half of the children surveyed reported “Fantastic”/“Okay” and none reported “Awful” feelings when presenting to the dental office.
- Although most respondents of both age groups reported “Fantastic” ratings of seeing a dentist wearing COVID 19 PPE, 35.7% of 7-10 year olds selected “Not Very Good”.
- Younger pediatric patients may require more explanation and time to get used to the new PPE recommendations.
- While these results can help promote awareness for dental practitioners to be more empathetic to patients under 10 years old, more research may still be needed.

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